

Case 2225/6***Borelis* de Montfort, 1808 (Foraminiferida): proposed conservation**

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Abstract. The purpose of this application is to conserve the foraminiferan generic name *Borelis* de Montfort, 1808 in its accepted sense by the designation of *Nautilus melo* Fichtel & Moll, 1798 (defined by a recently designated neotype) as its type species, replacing the original but subsequently unused *Borelis melonoides*.

1. Fichtel & Moll (1798, pp. 118–123, tab. 24) described the foraminiferal species *Nautilus melo* with the two ‘varieties’ α and β . These forms were used by de Montfort (1808) to create his two new genera *Clausulus* and *Borelis* respectively.

2. *Clausulus* de Montfort (1808, pp. 178–180) included the single species and hence type by monotypy *Clausulus indicator*. *Borelis* de Montfort (1808, pp. 170–172) included the single species *Borelis melonoides*. The specific names *indicator* and *melonoides* are equivalent to the Fichtel & Moll ‘*melo* var. α ’ and ‘*melo* var. β ’ respectively.

3. *Borelis* has been used very extensively by later authors; *Clausulus* has remained unused, and we propose its suppression. The nomenclatural situation is complicated by the fact that the *Borelis melo* (Fichtel & Moll) of later authors corresponds to the description and figures of Fichtel & Moll’s ‘*Nautilus melo* var. α ’, that is to say *Clausulus indicator*, so that the subsequent concept of *Borelis* does not match that of de Montfort, the original author (see Rögl & Hansen, 1984, p. 72).

4. In order to stabilize the name *Borelis melo* in its commonly used sense we (Rögl & Hansen (1984, pp. 71–72)) designated a specimen corresponding to *Nautilus melo* var. α as the neotype of *N. melo* (Naturhistorisches Museum Wien, inventory no. MI-599); this fixes the concept denoted by the specific name *melo*. According to modern practice de Montfort (1808) should have retained the name *melo* for one of his two new nominal species, *indicator* or *melonoides*, neither of which specific names has been used.

5. In the interests of nomenclatural stability we propose that the Commission should designate *Nautilus melo*, now defined by a neotype as the type species of *Borelis*; the use of the Commission’s plenary powers under Article 79 of the Code is necessary to set aside *B. melonoides* as the type species.

6. The specific name *indicator* de Montfort, 1808, was based on ‘*Nautilus melo* var. α ’ (see para. 3), and following the neotype designation for *N. melo* mentioned in para. 4 it is a synonym of *melo*; we propose its suppression.

7. Examination of the type material of *Nautilus melo* var. β (= *melonoides* de Montfort), preserved in the Vienna museum, shows that *Nonionina bulloides* d'Orbigny, 1846 is conspecific. Parker & Jones (1862, p. 184) described *Pullenia* with *N. bulloides* as the type species by monotypy. The specific name *bulloides* d'Orbigny (1846, p. 107) is in wide use and we propose suppression of its unused senior subjective synonym *melonoides*.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Borelis* de Montfort, 1808, and to designate *Nautilus melo* Fichtel & Moll, 1798, as defined by the neotype designated by Rögl & Hansen (1984), as the type species;
- (2) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *Clausulus* de Montfort, 1808;
 - (b) *melonoides* de Montfort, 1808, as published in the binomen *Borelis melonoides*;
 - (c) *indicator* de Montfort, 1808, as published in the binomen *Clausulus indicator*;
- (3) to place the following names on the Official List of Generic Names in Zoology:
 - (a) *Borelis* de Montfort, 1808 (gender: masculine), type species by designation in (1) above *Nautilus melo* Fichtel & Moll, 1798;
 - (b) *Pullenia* Parker & Jones, 1862 (gender: feminine), type species by monotypy *Nonionina bulloides* d'Orbigny, 1846;
- (4) to place the following names on the Official List of Specific Names in Zoology:
 - (a) *melo* Fichtel & Moll, 1798, as published in the binomen *Nautilus melo* and as defined by the neotype designated by Rögl & Hansen (1984) (specific name of the type species of *Borelis* de Montfort, 1808);
 - (b) *bulloides* d'Orbigny, 1846, as published in the binomen *Nonionina bulloides* (specific name of the type species of *Pullenia* Parker & Jones);
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Clausulus* de Montfort, 1808, as suppressed in (2) (a) above;
- (6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the names:
 - (a) *melonoides* de Montfort, 1808, as published in the binomen *Borelis melonoides* and as suppressed in (2) (b) above;
 - (b) *indicator* de Montfort, 1808, as published in the binomen *Clausulus indicator* and as suppressed in (2) (c) above.

References

- Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus Argonauta et Nautilus ad naturam picta et descripta*. 123 pp. Anton Pichler, Vienna.
- Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées*, vol. 1. 409 pp. F. Schoell, Paris.
- Orbigny, A. D. d', 1846. *Foraminifères fossiles du Bassin Tertiaire de Vienne (Autriche)*. 312 pp. Gide et Comp., Paris.
- Parker, W. K. & Jones, T. R. 1862 in Carpenter, W. B. *Introduction to the study of the Foraminifera*, 319 pp., 22 pl. Ray Society Publications, London.
- Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea Microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien*, vol. 3, 143 pp.